IN THE CLAIMS:

Please amend claims 1, 7 and 11 as follows:

1.   (Currently Amended) A method for searching at least one character string image embedded in an image, comprising:

providing [[the]] a first image;

detecting a character region in the first image based upon a shape thereof;

extracting a first image feature of the character region;

receiving an input of a character string of interest by a user;

generating a second image of said character string of interest;

extracting a second image feature from the second image input character string;

comparing the first image feature with the second image feature to determine a level of similarity; and

outputting the character region or the [[input]] first image comprising the character region based on the level of similarity.

2.   (Previously Presented) The method for searching at least one character string image in an image, as claimed in claim 1, wherein at the step of outputting said character region outputs the character regions in a descending order of a level of similarity.

3.   (Previously Presented) The method for searching at least one character string image in an image, as claimed in claim 1, wherein the step of detecting said character region involves extracting equi-luminance pixel strings, each of which has a luminance difference from a background in a pre-designated range and has a length of a pre-designated extent.

4.   (Previously Presented) The method for searching at least one character string image in an image, as claimed in claim 1, wherein the step of detecting said character region involves extracting equi-luminance pixel strings, each of which has a length equal to or longer than a pre-designated length in both vertical and horizontal directions and

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has a luminance difference from a background within a pre-designated range in both of the vertical and horizontal directions.

5.   (Previously Presented) The method for searching at least one character string image in an image, as claimed in claim 1, wherein both the first image feature and the second image feature to be extracted are one-dimensional feature strings whose numbers of edges in a vertical direction are obtained by binarizing luminance of each pixel and counting numbers of luminance changes in the character regions, when the character strings are arrayed horizontally, and

the step of determining a level of similarity involves elastic matching of the one-dimensional feature strings both of which constitute the first image feature and the second image feature.

6.   (Previously Presented) The method for searching at least one character string image in an image, as claimed in claim 1, wherein both the first image feature and the second image feature to be extracted are one-dimensional feature strings whose numbers of edges in a horizontal direction are obtained by binarizing luminance of each pixel and counting numbers of luminance changes in the character regions, when the character strings are arrayed vertically, and

the step of determining a level of similarity involves elastic matching of the one-dimensional feature strings of the first image feature and the second image feature.

7.   (Currently Amended) An apparatus for searching character string images in an image comprising:

a means for ~~entering an~~ providing a first image,

a means for detecting a character region from the frame of the ~~entered~~ first image on the basis of its shape,

a means for extracting a first image feature of the character [[area]] region,

an input means for entering a desired character string by a user,

a character image generating means for drawing a[[n]] second image of ~~characters corresponding to~~ the [[input]] desired character string,

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a means extracting a second image feature from the ~~generated character~~ second image,

a feature matching a means for matching the first and [[the]] second image features and determining a level of similarity, and

an output means for outputting a matched character region or the [[input]] <u>first</u> image comprising the matched character region.

8. (Previously Presented) The apparatus for searching character string image in an image, as claimed in claim 7, wherein said output means outputs the character regions in the descending order of the level of similarity obtained by the feature matching means.

9. (Previously Presented) The apparatus for searching character string image in an image, as claimed in claim 7, wherein said character region detecting means extracts equi-luminance pixel strings each of which has a length equal to or longer than a pre-designated length and has a luminance difference from a background within a pre-designated range.

10. (Previously Presented) The apparatus for searching character string image in an image, as claimed in claim 7, wherein both the first image feature and the second image feature to be extracted are one-dimensional feature strings whose numbers of edges in a vertical direction are obtained by binarizing luminance of each pixel and counting numbers of luminance changes in the character regions, when the character strings are arrayed horizontally, and said feature matching means performs elastic matching of the one-dimensional feature strings both of which constitute the first image feature and the second image feature.

11. (Currently Amended) A program stored on a computer readable medium for processing of character search in an image, comprising:

a module for ~~searching a character string~~ <u>providing a first</u> image,

a module for detecting a character region from the frame of ~~an entered~~ <u>the first</u> image on the basis of its shape,

a module for extracting a first image feature of the character [[area]] <u>region,</u>

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a module for receiving an input of a <u>desired</u> character string input by a user,

a module for drawing a[[n]] <u>second</u> image of the input character string ~~to be searched for~~,

a module for extracting a second image feature from the <u>second</u> ~~drawn character area~~ image,

a module for matching the first image feature and the second image feature to determine a level of similarity, and

a module for outputting the character region containing the input character string in respect of which the level of similarity has been determined.

12. (Previously Presented) The program as claimed in claim 11, wherein the module for detecting said character region includes extracting lines with a width in a specific range and extracting a concentrated region on the extracted lines as said character region.

13. (Previously Presented) The program as claimed in claim 12, wherein the line width is decided by a number of pixels with a luminance within a specific range or of equi-luminance.

14. (Previously Presented) The program as claimed in claim 13, wherein the line width is taken in vertical and horizontal directions.

15. (Previously Presented) The program as claim in claim 14, wherein the concentrated region is decided by projections of the lines in the vertical and horizontal directions.

16. (Previously Presented) The program as claimed in claim 12, wherein the module for detecting said character region extracts a character image feature string along one dimension of the character region or extracts the character image of interest by counting a number of edges with a predetermined luminance change.

17. (Previously Presented) The program as claimed in claim 12, further comprising a module for removing line border blurring by correcting a border pixel luminance value into a maximum or minimum luminance value of adjacent pixels.

18.   (Previously Presented) The method as claimed in claim 1, further comprising a step of removing non-character background in the image by outlining the character region with a rectangle box having a sufficient margin, then removing pixels outside of the rectangle box, and wherein the outputting step outputs the character region with the rectangle box.

19.   (Previously Presented) The program as claimed in claim 11, further comprising a module for removing non-character background in the image by outlining the character region with a rectangle box having a sufficient margin, then removing pixels outside of the rectangle box, and wherein the module for outputting outputs the character region with the rectangle box.